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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,520	05/16/2002	Pelham Nigel Hawker	JMYT-251US	2633

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EXAMINER	
TRAN, HIEN THI	
ART UNIT	**PAPER NUMBER**
1764	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/018,520	HAWKER, PELHAM NIGEL	
	Examiner	Art Unit	
	Hien Tran	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/27/05 & 11/4/05*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/4/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, the language of the claim is directed to method limitation, which renders the claim vague and indefinite as it is unclear as to what structural limitation applicant is attempting to recite.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The art area applicable to the instant invention is that of diesel engine exhaust system.

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

6. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allansson et al (6,427,436 or WO 99/09307) in view of Paas (5,785,030).

With respect to claim 9, Allansson et al discloses a diesel engine system comprising: an engine intake; and an exhaust system, wherein the exhaust system comprises: an oxidation catalyst 5a; a particulate trap 5b; and an exhaust gas recirculation system (EGR) having an EGR system intake, wherein the EGR system intake is mounted downstream of the oxidation catalyst 5a.

The apparatus of Allansson et al is substantially the same as that of the instant claims, but fails to disclose whether the particulate trap may be located downstream of the EGR system intake.

However, Paas discloses the conventionality of providing a particulate trap 20, 120, 220 locating downstream of the EGR system intake 50 (see, for example, Figs. 1, 4, 5).

Accordingly, at the time of the invention was made, it would have been obvious to one skilled in the art to alternately place the particulate trap downstream of the EGR system intake since positioning the parts of the apparatus is no more than a design choice, and well within the knowledge of one skilled in the art so as to prevent soot dust from being stuck and deposited in an air intake port thereof as evidenced by Paas and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

With respect to claim 10, Paas shows that a portion of the exhaust gas passes through the particulate trap and does not pass to the engine intake (see, for example, Fig. 5).

With respect to claim 11, Paas discloses that the trap 20, 120, 220, is mounted in the EGR system.

With respect to claim 12, since the claim is not structurally further limiting, the trap 5b and the EGR system of Allansson et al as modified by Paas meet the claims. In any event, Allansson et al discloses the recirculation ratio of 5-30% by volume (col. 4, lines 55-57 of '436).

With respect to claim 13, Allansson et al discloses a cooler 7 and an EGR valve 8.

With respect to claim 14, Allansson et al discloses a process for the reduction of polluting emissions from diesel engine exhaust gas including NO_x, comprising: passing the exhaust gas through an oxidation catalyst 5a to generate NO_2 from NO in the gas, taking a portion of the gas and recycling said portion to the engine intake and trapping particulates in a filter 5b and oxidizing the particulates by reaction with at least some of the NO_2 generated by the oxidation catalyst 5a (col. 4, lines 44-62 of '436).

The method of Allansson et al is substantially the same as that of the instant claims, but fails to disclose whether the filter may be mounted downstream of the EGR system intake.

The same teachings/comments with respect to Paas regarding the location of the filter as set forth above apply.

7. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over either JP 08-338320 or JP 09-88727 or JP 06-066208 in view of Allansson et al (6,427,436 or WO 99/09307).

With respect to claims 9-11, 14, JP 08-338320 or JP 09-88727 or JP 06-066208 discloses a diesel engine system comprising:

an exhaust system including: an oxidation catalyst; a particulate trap; and an exhaust gas recirculation system (EGR), wherein the particulate trap is downstream of the EGR system intake.

The apparatus and method of JP 08-338320 or JP 09-88727 are substantially the same as that of the instant claims, but fail to disclose whether EGR system intake may be mounted downstream of the oxidation catalyst.

However, it would have been obvious to one having ordinary skill in the art to provide another set of oxidation catalyst and particulate trap in the exhaust pipe of the system in the apparatus and method of JP 08-338320 or JP 09-88727 or JP 06-066208 so as to prevent soot dust and pollutants in the exhaust gas from emitting to the atmosphere without being purified and since providing another set of oxidation catalyst and particulate trap is a mere duplication of working parts and since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

In any event, Allansson et al discloses the conventionality of providing an EGR system intake mounted downstream of the oxidation catalyst.

It would have been obvious to one having ordinary skill in the art to provide another set of oxidation catalyst and particulate trap in the exhaust pipe of the system as taught by Allansson et al in the apparatus and method of JP 08-338320 or JP 09-88727 or JP 06-066208 so as to prevent soot dust and pollutants in the exhaust gas from emitting to the atmosphere without being purified and since providing another set of oxidation catalyst and particulate trap is a mere duplication of the essential working parts of a device which involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With respect to claims 12-13, the same teachings with respect to Allansson et al apply.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 9-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,427,436 (Allansson et al) in view of Paas (5,785,030).

The same teachings/comments with respect to Allansson et al and Paas apply.

Response to Arguments

10. Applicant's arguments filed 10/27/05 have been fully considered but they are not persuasive.

Applicant argues that Paas does not disclose the use of particulate filter to prevent soot dust from being stuck and deposited in the air intake port thereof. Such contention is not persuasive as Paas discloses provision of the particulate filter, e.g. 20, 120, 220, for the portion of filtered exhaust gas is recycled to the engine intake manifold through the EGR line, e.g. 87, 187, 287. Since all of the particulates contained within the exhaust gas have been captured by the filter, the filtered exhaust recycled to the engine intake manifold does not contain any particulates (see, for example, col. 4. lines 4-17, etc).

Applicant argues that Paas fails to disclose a particulate filter downstream of the EGR system intake. Such contention is not persuasive as Paas discloses provision of the particulate filter, e.g. 20, 120, 220 locating downstream of the EGR system intake, e.g. 50 (see, for example, Figs. 1, 4, 5).

Applicant argues that the motivation of preventing soot dust from being stuck and deposited in the air intake port is not found in Paas because Paas fails to disclose a particulate filter downstream of the EGR system intake. Such contention is not persuasive for the same reasons set forth above.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the

time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that the JP '320 and '727 are not suited to heavy duty diesel applications. Such contention is not persuasive as the instant claims do not recite any structures to differentiate the system of the instant invention from that of the JP references.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1454. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hien Tran

Hien Tran
Primary Examiner
Art Unit 1764

HT
January 6, 2006